

Pragmatic Trial of Video Education in Nursing Homes (PROVEN)

Principal Investigators

Susan Mitchell, MD, MPH; Angelo Volandes, MD, MPH;
Vincent Mor, PhD

ClinicalTrials.gov Identifier

[NCT02612688](https://clinicaltrials.gov/ct2/show/study/NCT02612688)

Sponsoring Institution

Brown University

NIH Institute Providing Oversight

[National Institute on Aging \(NIA\)](https://www.nih.gov/institutes/national-institute-on-aging)

DATA AND RESOURCE SHARING

- [Data sharing checklist](#)
- **Primary study results:** Mitchell SL, Volandes AE, Gutman R, et al. Advance care planning video intervention among long-stay nursing home residents: a pragmatic cluster randomized clinical trial. *JAMA Intern Med.* 2020;180(8):1070-1078. PMID: [32628258](https://pubmed.ncbi.nlm.nih.gov/32628258/).

STUDY AT A GLANCE



STUDY QUESTION AND SIGNIFICANCE

Nursing homes are often charged with guiding patients through decisions about the direction of their treatment. Identifying effective approaches that nursing homes can use to better promote goal-directed care within existing resources is a research, public health, and clinical priority. Yet, evidenced-based approaches to advance care planning in nursing homes are lacking. The objective of the study was to test the effect of an advance care planning video program on hospital transfers, burdensome treatments, and hospice enrollment among long-stay nursing home residents.



DESIGN AND SETTING

Cluster randomized trial with 197,692 residents in 360 nursing homes in 32 states owned by 2 for-profit corporations, of which 241 facilities were randomly assigned to the control group and 119 facilities were randomly assigned to the intervention.



INTERVENTION AND METHODS

The intervention involved 5 short advance care planning videos made available on tablet computers or online. Designated champions in the intervention facilities were instructed to offer residents or their proxies the opportunity to view a video on admission and every 6 months. Control

facilities used usual advance care planning practices. The primary outcome was hospital transfers per 1000 person-days alive among residents with advanced illness. Secondary outcomes included the proportion of residents with or without advanced illness experiencing 1 or more hospital transfer, 1 or more burdensome treatment, and hospice enrollment. The analyses followed the intention-to-treat principle.



FINDINGS

There was no significant reduction in hospital transfers per 1000 person-days alive in the intervention vs control groups. Secondary outcomes did not significantly differ between groups among residents with and without advanced illness. Only 912 of 4171 residents with advanced illness viewed the advance care planning videos. Facility-level rates of showing the videos ranged from 0% to more than 40%.



CONCLUSIONS AND RELEVANCE

The advance care planning video program was not effective in reducing hospital transfers, decreasing burdensome treatment use, or increasing hospice enrollment among long-stay nursing home residents with or without advanced illness. The low level of intervention fidelity highlights the challenges of implementing new programs in nursing homes.

GENERALIZABLE LESSONS

| Challenge | Solution |
|--------------------------------|---|
| Low implementation fidelity | High level of buy-in from frontline staff responsible for implementing the program, and strong endorsement from healthcare system leadership |
| Healthcare system interactions | Strong relationships with healthcare systems before the study; study-specific project manager in each healthcare system to oversee the project and serve as liaison between research team and healthcare system |

“Becoming integrated into the NIH Collaboratory scientific community was an exceptional experience for all 3 of the PROVEN PIs. Learning from the other investigators and Collaboratory leaders was the definitive highlight. We learned so much, and the experience of PROVEN will lead the way for future pragmatic trials in the nursing home setting.” — Susan Mitchell

ADDITIONAL RESOURCES

- Article: [Understanding Implementation Fidelity in a Pragmatic Randomized Clinical Trial in the Nursing Home Setting: A Mixed-Methods Examination](#) (2019)
- Article: [Proxies Viewing Decision Support Video in Nursing Home Report Higher Advance Care Planning Engagement](#) (2019)
- Article: [Black Nursing Home Residents More Likely to Watch Advance Care Planning Video](#) (2020)
- Article: [Barriers and Facilitators to Implementing a Pragmatic Trial to Improve Advance Care Planning in the Nursing Home Setting](#) (2019)

Access the complete set of [PROVEN resources](#).